[0001] with the following headings, subheadings, and new paragraph:

---CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.1] The present application claims is a U.S. National Stage of International Application No. PCT/EP00/07076 filed July 24, 2000 and claims priority under 35 U.S.C. § 119 of German Patent Application No. 199 34 987.8 filed July 26, 1999.

BACKGROUND OF THE INVENTION

1. Field of the Invention---

Please replace the subheading before paragraph [0002] with the following subheading:

---2. Discussion of Background Information---

Please replace the heading before paragraph [0006] with the following heading:

---SUMMARY OF THE INVENTION---

Please replace paragraph [0007] with the following amended paragraph:

[0007] The solution of this technical problem is achieved through an anode material being located on a diamond window. The process-related task of producing such an x-ray anode includes coating an auxiliary layer with a diamond layer by chemical vapor deposition (CVD), and depositing a metallic layer on the diamond layer. Advantageous embodiments are provided in the dependent claims.

Please add the following headings and new paragraphs [0017.1] and [0017.2] after

paragraph [0017]:

---BRIEF DESCRIPTION OF THE DRAWINGS

[0017.1] The present invention is further described in the detailed description which follows, in reference to the drawing, and wherein:

[0017.2] Figure 1 illustrates an X-ray anode in accordance with the features of the instant invention.

DETAILED DESCRIPTION OF THE PRESENT INVENTION---

Please replace paragraph [0019] with the following amended paragraph:

[0019] A polycrystalline diamond layer 1 with a thickness of 250 μm is deposited on an auxiliary substrate using hot-filament CVD. After removing the auxiliary substrate, a tungsten layer 2 with a thickness of 6 μm is deposited on this diamond layer using physical vapor deposition (PVD). The tungsten layer covers the diamond layer completely. The x-ray source is mounted in the housing (4) of a commercial x-ray microscope by a clamp 3, with sealing washers 14 being used to ensure a stable vacuum. The Figure shows this microfocus source in installed condition. X-radiation hv is produced by localized bombardment of the x-ray anode with electrons e⁻. The maximum achievable radiation density is measured with this x-ray anode. If the diamond layer is replaced with a 500 μm thick beryllium layer under otherwise identical conditions, the radiation density of the x-radiation produced is reduced by a factor of 4. With a diamond layer thickness of likewise 500 μm, the radiation density